

JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number:

03109524 A

(43) Date of publication of application: 09.05.1991

(51) Int. CI

G02F 1/133

G09G 3/20,

G09G 3/36

(21) Application number:

02148304

(22) Date of filing:

05.06.1990

(30) Priority:

26.06.1989 JP 01163060

(71) Applicant: MATSUSHITA ELECTRIC IND CO

LTD

(72) Inventor:

GOHARA YOSHIHIRO

FURUBAYASHI YOSHINORI

FUJIWARA SHOZO

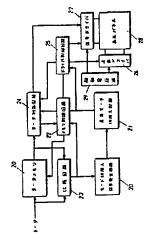
(54) DRIVING METHOD FOR DISPLAY PANEL AND **DISPLAY DEVICE**

(57) Abstract:

PURPOSE: To drastically shorten the average renewal time of a screen by using a matrix type bistable display panel and rewriting a display after impressing a prescribed voltage only on an image which must be rewritten.

CONSTITUTION: A display data generated by a CPU, etc., is stored in a data memory 20, and in accordance with a display mode, in the case of partial scanning, a renewal data is extracted by a comparison circuit 23 so as to read out the data necessary for a data control circuit 24 from the memory. The writing and the reading out of the data memory 20 are controlled by a memory control circuit 22, and a scanning driver 26 and a signal driver 27 are controlled by a driver control circuit 25 in synchronism with the read-out timing so as to scan only a scanning electrode which needs rewriting. On the other hand, in the case that the display mode displays complete scanning, the data in the data memory 20 is successively read out, and the display panel 28 is completely scanned so as to renew the screen. Thus, the display with high uniformity can be always maintained because of using a partial scanning method and a complete scanning method jointly in this way.

COPYRIGHT: (C)1991,JPO&Japio



EST AVAILABLE COPY